

## DETAILED ACTION

### Status of Claims

1. This action is in reply to the RCE filed on 10 September 2009.
2. Claims 27 and 28 have been amended.
3. Claims 1-26, 42, and 43 have been canceled by previous actions.
4. Claims 27-41, 44, and 45 are currently pending and have been examined.

### Allowable Subject Matter

5. The following is an examiner's statement of reasons for allowance: None of the prior art of record either individually or in combination disclose *obtaining...information further including information on an energy cost of the onboard battery based on charge and discharge histories of the onboard battery, the charge and discharge histories of the onboard battery including, for each unit of charge stored in the battery, the generation cost of the unit of charge.*

The closest prior art, Gupta (US 5,349,535) discloses on column 3, lines 65-68, "the battery supplier would need to take this into account when billing and accounting for the health and usage history (rate and number of charge/discharge cycles) of the pack") *[the information further including information on an energy cost of the onboard battery based on charge and discharge histories of the on board battery]* Gupta does not disclose *including, for each unit of charge stored in the battery, the generation cost of the unit of charge.* Gupta, by itself or together with other prior art, fails to disclose this distinction. Unlike Gupta, where the cost of the charge /discharge history is taken into account, the invention includes information regarding the generation costs of the unit of charge for each unit of charge stored in the battery.

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The closest foreign prior art, Del et al. (EP 0830968 A1) discloses varying the transmitted power through the mechanical connection to this electrical machine immediately directed towards a set point while the battery gives out or takes in power during the change in operating state with regard to at least one operating parameter like minimal fuel consumption, toxic emissions or noise generation, and permits a rapid change of engine speed without special allowance for the variation of the generated power by the engine. Del et al. neither individually nor in combination with the prior art of record discloses *obtaining...information further including information on an energy cost of the onboard battery based on charge and discharge histories of the onboard battery, the charge and discharge histories of the onboard battery including, for each unit of charge stored in the battery, the generation cost of the unit of charge.*

The closest foreign prior art, Alt et al. ("Assessment of Utility Side Cost Savings from Battery Energy Storage") discloses creating an incremental cost threshold that if the incremental cost is below the threshold and battery is not fully charged, the storage system will be charged, and if the increment cost is above the threshold the battery is not fully discharged, the storage system will be discharged. Alt et al. neither individually nor in combination with the prior art of record discloses *obtaining...information further including information on an energy cost of the onboard battery based on charge and discharge histories of the onboard battery, the charge and discharge histories of the onboard battery including, for each unit of charge stored in the battery, the generation cost of the unit of charge.*

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **David J. Clark** whose telephone number is **571.270.3938**. The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **JOHN W. HAYES** can be reached at **571.272.6708**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> <<http://pair-direct.uspto.gov>>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

Any response to this action should be mailed to:

**Commissioner of Patents and Trademarks**  
P.O. Box 1450  
Alexandria, VA 22313-1450

or faxed to **571-273-8300**.

Hand delivered responses should be brought to the **United States Patent and Trademark Office Customer Service Window**:

Randolph Building  
401 Dulany Street  
Alexandria, VA 22314.

/David J Clark/  
Examiner, Art Unit 3628

/JOHN W HAYES/  
Supervisory Patent Examiner, Art Unit 3628